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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,185	04/03/2000	Clive C. Hayball	584-1025	4920

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EXAMINER	
LAFORGIA, CHRISTIAN A	
ART UNIT	**PAPER NUMBER**
2131	

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/541,185	HAYBALL ET AL.	
	Examiner	Art Unit	
	Christian La Forgia	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 October 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 April 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 05 October 2004 has been noted and made of record.

2. Claims 1-27 have been presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

4. See further rejections that follow.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claim1-9, 10, 12-17, 20-22, and 24-27 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,529,499 to Doshi et al., hereinafter Doshi, in view of U.S. Patent No. 6,442,147 to Mauger et al., hereinafter Mauger.

7. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in

the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

8. As per claims 1, 17, and 26, Doshi teaches a method of provisioning a path between two specified nodes in a connectionless communications network such that the path has a specified bandwidth and a guaranteed quality of service is provided over that path, wherein the communications network supports a differentiated service mechanism, solid method comprising the steps of:

(i) specifying a bandwidth and guaranteed quality of service to be provided over the path (column 3, lines 49-54; column 4, lines 49-57; column 6, lines 23-27; column 7, lines 33-56);

(iii) determining a path between the two specified nodes (column 4, lines 1-19);

(v) assessing the amount of available bandwidth over the path (column 3, lines 55-67; column 4, lines 33-57); and

(vi) producing provisioning information, taking into account said service type and amount of available bandwidth, to provision the path using the model for output to the network or a network simulator (column 5, lines 17-48; column 6, line 64 to column 7, line 14).

9. Doshi does not discloses accessing a model of the connectionless communications network which is separate from the network nor using the model, and assessing the service type of data to be sent over said path.

10. Mauger discloses (ii) accessing a model of the connectionless communications network which is separate from the network (column 2, lines 29-38, column 5, lines 16-43, column 6, line 50 to column 7, line 28);

(iv) assessing the service type of data to be sent over said path (column 5, line 50 to column 6, line 34). Wherein the service types are QoS classes 1 and 2.

11. Mauger also discloses producing provisioning information, taking into account said service type and amount of available bandwidth, to provision the path using the model for output to the network or a network simulator (column 5, line 50 to column 6, line 34).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a model and assess the service type of the data to be sent, since Mauger discloses at column 2, lines 25-57 that using a model with service classes would determine the capacity determination of the network in order to maximize the network's efficiency.

13. Regarding claims 2 and 20, Doshi teaches wherein the step (iii) of assessing the amount of available bandwidth comprises accessing a bandwidth tally for each node in the path (column 3, lines 55-67; column 5, lines 17-48).

14. With regards to claim 3, Doshi teaches accessing a bandwidth tally for each link in the path (column 3, lines 55-67; column 5, lines 17-48).

15. Regarding claim 4, Doshi teaches inputting the provisioning information to the communications network in order to provision the communications network (column 5, lines 17-48; column 6, line 52 to column 7, line 14).

16. Regarding claims 5 and 21, Doshi teaches wherein the path is auto generated (column 5, lines 17-48).

17 Concerning claim 6, Doshi teaches wherein the path is determined using the shortest path first algorithm (column 8, lines 45-51).

18. Regarding claim 7, Doshi teaches wherein the path is determined using a discovery method (column 3, lines 42-67).

19. With regards to claim 8, Doshi teaches wherein the path is pre-specified by a network operator (column 6, lines 24-36).

20. Regarding claim 9, Doshi teaches which further comprises the step of adding service type labels to traffic (column 4, lines 52-57).

21. Regarding claims 10 and 22, Doshi teaches wherein the connectionless communications network is an Internet protocol communications network (column 1, lines 54-59).

22. Regarding claims 12 and 24, Doshi teaches the step of inputting information about the path, the specified bandwidth and quality of service, the differentiated service mechanism and the provisioning information to a simulator which is arranged to forecast traffic congestion points in the connectionless communications network (column 7, lines 33-66).

23. Regarding claims 13 and 25, Doshi teaches wherein the differentiated service mechanism comprises priority queuing (column 6, lines 44-51).

24. Regarding claim 14, Doshi teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and one of the two specified nodes is arranged to label traffic according to its allocated service type (column 6, lines 23-51).

25. Regarding claim 15, Doshi teaches wherein the differentiated service mechanism comprises allocating traffic to one of two or more service types and wherein the method further comprises determining the proportion of the bandwidth at a given node or link that is reserved for use by traffic of a given service type (column 6, lines 23-51).

26. Regarding claim 16, Doshi teaches wherein the provisioning information is determined such that the proportion is less than a specified threshold level (column 7, lines 33-56).

27. Regarding claim 27, Doshi teaches a connectionless communications network (column 1, lines 54-59).

28. Claims 11, 18, 19, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doshi in view of Mauger as applied above, and in further view of United States Patent No. 6,430,154 to Hunt et al., hereinafter Hunt.

29. Regarding claims 11 and 23, Doshi and Mauger do not teach wherein the path is a virtual leased line.

30. Hunt teaches wherein the path is a virtual leased line (column 2, lines 23-46). Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the leased lines of Hunt with the combined system of Doshi and Mauger because it would ensure a low loss and low delay service to subscribers. It would enable this low loss and low delay by taking into account the random breaks in communication lines by other objects that take precedence.

31. Regarding claim 18, Doshi and Mauger do not teach which further comprises a graphical user interface provided on a client computer connected to the computer system.

32. Hunt teaches which further comprises a graphical user interface provided on a client computer connected to the computer system (Figure 2 [block 22]; column 8, lines 32-48). Therefore it would have been obvious to one with ordinary skill in the art to combine the GUI of Hunt with the combined system of Doshi and Mauger because it would enable a better way to manage network traffic. By giving the ability to see where congestions lie in a graphical setting, it would allow a user to be able to reroute information accordingly. See MPEP § 2144.04; see *In re Seid,* 161 F.2d 229, 231, 73 USPQ 431, 433 (CCPA 1947).

33. With regards to claim 19, Doshi and Mauger do not teach wherein the graphical user interface is web-based.

34. Hunt teaches wherein the graphical user interface is web-based (Figure 2 [block 22]; column 8, lines 32-48). It would have been obvious to one with ordinary skill in the art to combine the web based interface of Hunt with the combined system of Doshi and Mauger because it would enable a better way to manage Internet traffic. By giving the ability to see where congestions lie in a graphical setting, it would allow a user to be able to reroute information accordingly. See MPEP § 2144.04; see *In re Seid,* 161 F.2d 229, 231, 73 USPQ 431, 433 (CCPA 1947).

Conclusion

35. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

36. The following patents are cited to further show the state of the art with respect to diffserv networks, such as:

United States Patent No. 6,718,380 to Mohaban et al., which is cited to show storing policies for use to policy-based management of quality of service treatments of network data traffic flows.

United States Patent No. 6,657,960 to Jeffries et al., which is cited to show controlling a plurality of pipes in a computer network.

United States Patent No. 6,788,647 to Mohaban et al., which is cited to show storing policies for use to policy-based management of quality of service treatments of network data traffic flows.

United States Patent Application Publication No. US 2002/0093957 to Yazaki et al., which is cited to show a packet communication system with quality of service control functions.

37. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

38. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792. The examiner can normally be reached on Monday thru Thursday 7-5.

40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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